

Fig. 1A

7

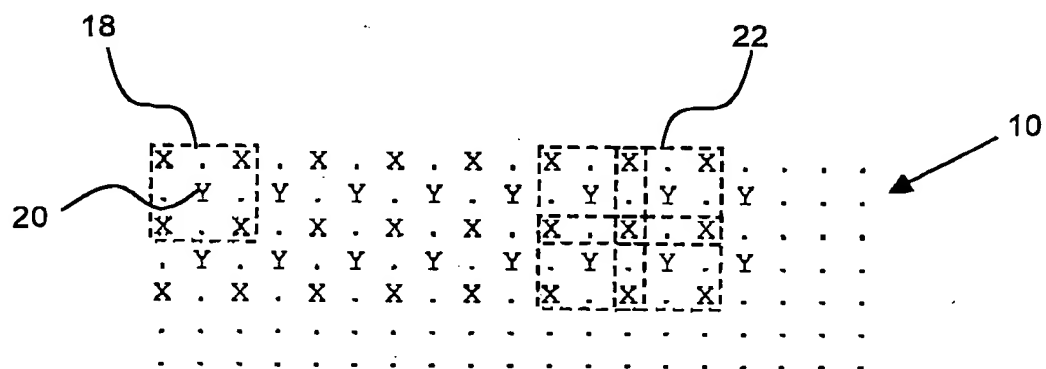
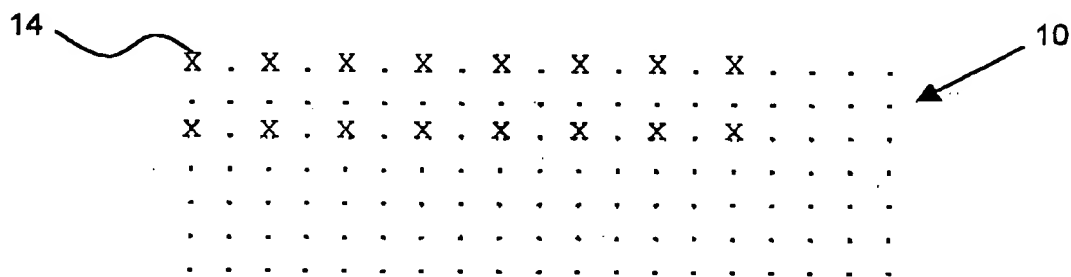
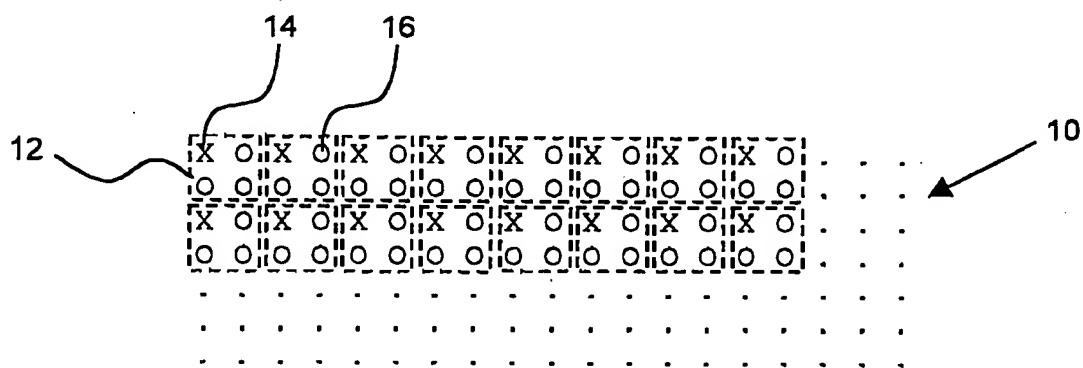
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graph TD
    B((B)) --> 220[FORM A DIAMOND-SHAPED GROUPING FROM FOUR NEAREST SUB-SAMPLED AND PREDICTED PIXELS]
    220 --> 230[PREDICT PIXEL VALUE WITHIN DIAMOND GROUPING]
    230 --> 240[DETERMINE PREDICTION ERROR]
    240 --> 250[DISCARD PREDICTION ERROR IF < MIN, > MAX]
    250 --> C((C))
    C --> 260[QUANTIZE PREDICTION ERROR]
    260 --> 270[DISCARD SMALL PREDICTION ERRORS]
    270 --> 280[ENCODE MODERATE PREDICTION ERRORS]
    280 --> 290[ENTROPY CODE REMAINING PREDICTION ERRORS]
    290 --> 300[CONSTRUCT COMPRESSED IMAGE FILE FROM TRANSFORM-CODED SUB-SAMPLED COLOR COMPONENTS AND CODED PREDICTION ERRORS]
    300 --> FINISH[FINISH]

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graph TD
    Start([START]) --> A[A]
    A --> B[B]
    B --> C[C]
    C --> D[D]
    D --> E[E]
    E --> F[F]
    F --> G[G]
    G --> H[H]
    H --> I[I]
    I --> J[J]
    J --> K[K]
    K --> L[L]
    L --> M[M]
    M --> N[N]
    N --> O[O]
    O --> P[P]
    P --> Q[Q]
    Q --> R[R]
    R --> S[S]
    S --> T[T]
    T --> U[U]
    U --> V[V]
    V --> W[W]
    W --> X[X]
    X --> Y[Y]
    Y --> Z[Z]
    Z --> AA[AA]
    AA --> AB[AB]
    AB --> AC[AC]
    AC --> AD[AD]
    AD --> AE[AE]
    AE --> AF[AF]
    AF --> AG[AG]
    AG --> AH[AH]
    AH --> AI[AI]
    AI --> AJ[AJ]
    AJ --> AK[AK]
    AK --> AL[AL]
    AL --> AM[AM]
    AM --> AN[AN]
    AN --> AO[AO]
    AO --> AP[AP]
    AP --> AQ[AQ]
    AQ --> AR[AR]
    AR --> AS[AS]
    AS --> AT[AT]
    AT --> AU[AU]
    AU --> AV[AV]
    AV --> AW[AW]
    AW --> AX[AX]
    AX --> AY[AY]
    AY --> AZ[AZ]
    AZ --> BA[BA]
    BA --> BB[BB]
    BB --> BC[BC]
    BC --> BD[BD]
    BD --> BE[BE]
    BE --> BF[BF]
    BF --> BG[BG]
    BG --> BH[BH]
    BH --> BI[BI]
    BI --> BJ[BJ]
    BJ --> BK[BK]
    BK --> BL[BL]
    BL --> BM[BM]
    BM --> BN[BN]
    BN --> BO[BO]
    BO --> BP[BP]
    BP --> BQ[BQ]
    BQ --> BR[BR]
    BR --> BS[BS]
    BS --> BT[BT]
    BT --> BU[BU]
    BU --> BV[BV]
    BV --> BW[BW]
    BW --> BX[BX]
    BX --> BY[BY]
    BY --> BZ[BZ]
    BZ --> CA[CA]
    CA --> CB[CB]
    CB --> CC[CC]
    CC --> CD[CD]
    CD --> CE[CE]
    CE --> CF[CF]
    CF --> CG[CG]
    CG --> CH[CH]
    CH --> CI[CI]
    CI --> CJ[CJ]
    CJ --> CK[CK]
    CK --> CL[CL]
    CL --> CM[CM]
    CM --> CN[CN]
    CN --> CO[CO]
    CO --> CP[CP]
    CP --> CQ[CQ]
    CQ --> CR[CR]
    CR --> CS[CS]
    CS --> CT[CT]
    CT --> CU[CU]
    CU --> CV[CV]
    CV --> CW[CW]
    CW --> CX[CX]
    CX --> CY[CY]
    CY --> CZ[CZ]
    CZ --> DA[DA]
    DA --> DB[DB]
    DB --> DC[DC]
    DC --> DD[DD]
    DD --> DE[DE]
    DE --> DF[DF]
    DF --> DG[DG]
    DG --> DH[DH]
    DH --> DI[DI]
    DI --> DJ[DJ]
    DJ --> DK[DK]
    DK --> DL[DL]
    DL --> DM[DM]
    DM --> DN[DN]
    DN --> DO[DO]
    DO --> DP[DP]
    DP --> DQ[DQ]
    DQ --> DR[DR]
    DR --> DS[DS]
    DS --> DT[DT]
    DT --> DU[DU]
    DU --> DV[DV]
    DV --> DW[DW]
    DW --> DX[DX]
    DX --> DY[DY]
    DY --> DZ[DZ]
    DZ --> EA[EA]
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    EB --> EC[EC]
    EC --> ED[ED]
    ED --> EE[EE]
    EE --> EF[EF]
    EF --> EG[EG]
    EG --> EH[EH]
    EH --> EI[EI]
    EI --> EJ[EJ]
    EJ --> EK[EK]
    EK --> EL[EL]
    EL --> EM[EM]
    EM --> EN[EN]
    EN --> EO[EO]
    EO --> EP[EP]
    EP --> EQ[EQ]
    EQ --> ER[ER]
    ER --> ES[ES]
    ES --> ET[ET]
    ET --> EU[EU]
    EU --> EV[EV]
    EV --> EW[EW]
    EW --> EX[EX]
    EX --> EY[EY]
    EY --> EZ[EZ]
    EZ --> FA[FA]
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    FB --> FC[FC]
    FC --> FD[FD]
    FD --> FE[FE]
    FE --> FF[FF]
    FF --> FG[FG]
    FG --> FH[FH]
    FH --> FI[FI]
    FI --> FJ[FJ]
    FJ --> FK[FK]
    FK --> FL[FL]
    FL --> FM[FM]
    FM --> FN[FN]
    FN --> FO[FO]
    FO --> FP[FP]
    FP --> FQ[FQ]
    FQ --> FR[FR]
    FR --> FS[FS]
    FS --> FT[FT]
    FT --> FU[FU]
    FU --> FV[FV]
    FV --> FW[FW]
    FW --> FX[FX]
    FX --> FY[FY]
    FY --> FZ[FZ]
    FZ --> GA[GA]
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    GD --> GE[GE]
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    GF --> GG[GG]
    GG --> GH[GH]
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    GR --> GS[GS]
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    GU --> GV[GV]
    GV --> GW[GW]
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    GX --> GY[GY]
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    GZ --> HA[HA]
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    HC --> HD[HD]
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    HF --> HG[HG]
    HG --> HH[HH]
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    HI --> HJ[HJ]
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    HS --> HT[HT]
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    HV --> HW[HW]
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    IA --> IB[IB]
    IB --> IC[IC]
    IC --> ID[ID]
    ID --> IE[IE]
    IE --> IF[IF]
    IF --> IG[IG]
    IG --> IH[IH]
    IH --> II[II]
    II --> IJ[IJ]
    IJ --> IK[IK]
    IK --> IL[IL]
    IL --> IM[IM]
    IM --> IN[IN]
    IN --> IO[IO]
    IO --> IP[IP]
    IP --> IQ[IQ]
    IQ --> IR[IR]
    IR --> IS[IS]
    IS --> IT[IT]
    IT --> IU[IU]
    IU --> IV[IV]
    IV --> IW[IW]
    IW --> IX[IX]
    IX --> IY[IY]
    IY --> IZ[IZ]
    IZ --> JA[JA]
    JA --> JB[JB]
    JB --> JC[JC]
    JC --> JD[JD]
    JD --> JE[JE]
    JE --> JF[JF]
    JF --> JG[JG]
    JG --> JH[JH]
    JH --> JI[JI]
    JI --> JJ[JJ]
    JJ --> JK[JK]
    JK --> JL[JL]
    JL --> JM[JM]
    JM --> JN[JN]
    JN --> JO[JO]
    JO --> JP[JP]
    JP --> JQ[JQ]
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    JR --> JS[JS]
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    KB --> KC[KC]
    KC --> KD[KD]
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    KE --> KF[KF]
    KF --> KG[KG]
    KG --> KH[KH]
    KH --> KI[KI]
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    KJ --> KK[KK]
    KK --> KL[KL]
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    KN --> KO[KO]
    KO --> KP[KP]
    KP --> KQ[KQ]
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    KT --> KU[KU]
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    KV --> KW[KW]
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    KX --> KY[KY]
    KY --> KZ[KZ]
    KZ --> LA[LA]
    LA --> LB[LB]
    LB --> LC[LC]
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    LD --> LE[LE]
    LE --> LF[LF]
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    LG --> LH[LH]
    LH --> LI[LI]
    LI --> LJ[LJ]
    LJ --> LK[LK]
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    LL --> LM[LM]
    LM --> LN[LN]
    LN --> LO[LO]
    LO --> LP[LP]
    LP --> LQ[LQ]
    LQ --> LR[LR]
    LR --> LS[LS]
    LS --> LT[LT]
    LT --> LU[LU]
    LU --> LV[LV]
    LV --> LW[LW]
    LW --> LX[LX]
    LX --> LY[LY]
    LY --> LZ[LZ]
    LZ --> MA[MA]
    MA --> MB[MB]
    MB --> MC[MC]
    MC --> MD[MD]
    MD --> ME[ME]
    ME --> MF[MF]
    MF --> MG[MG]
    MG --> MH[MH]
    MH --> MI[MI]
    MI --> MJ[MJ]
    MJ --> MK[MK]
    MK --> ML[ML]
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    MN --> MO[MO]
    MO --> MP[MP]
    MP --> MQ[MQ]
    MQ --> MR[MR]
    MR --> MS[MS]
    MS --> MT[MT]
    MT --> MU[MU]
    MU --> MV[MV]
    MV --> MW[MW]
    MW --> MX[MX]
    MX --> MY[MY]
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    MZ --> NA[NA]
    NA --> NB[NB]
    NB --> NC[NC]
    NC --> ND[ND]
    ND --
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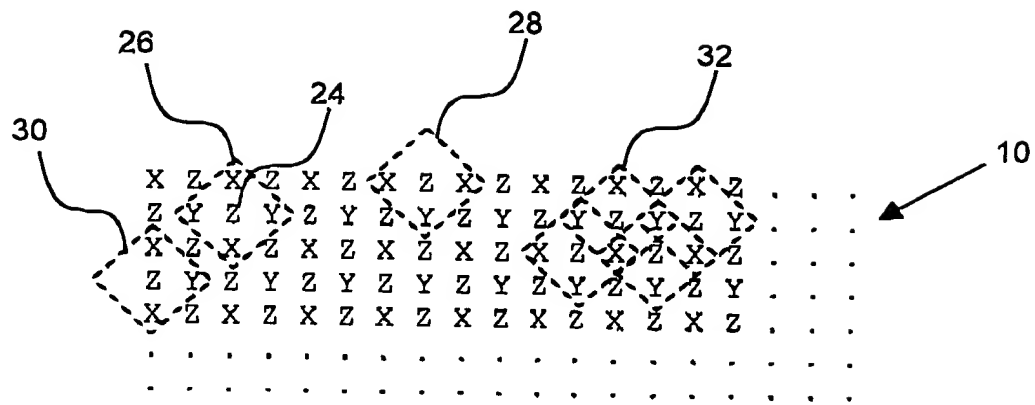


Fig. 2D

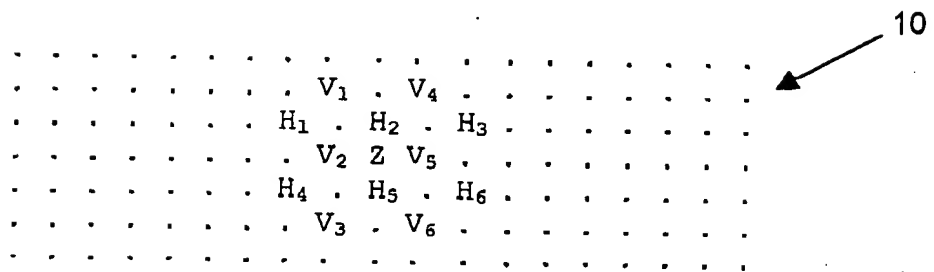


Fig. 2E